

IN THE CLAIMS:

Please cancel claims 1 through 17 without prejudice or disclaimer.

1-17. (Canceled)

18. (Original) A set of mixed homologous probes for detection of at least one allelic variant of a nucleic acid family, wherein at least one of said set of mixed homologous probes is non-linear, said set of mixed homologous probes comprising at least one sequence complementary to and specific for one of the allelic variants of said nucleic acid family, except for a specific mismatch located upstream and/or downstream from the site of variation.

19. (Original) The set of mixed homologous probes of claim 18, wherein at least two of said probes comprise an identical sequence except for the site of variation.

20. (Original) The set of mixed homologous probes of claim 18, wherein said mismatch comprises 1-3 nucleotides.

21. (Original) The set of mixed homologous probes of claim 19, wherein said mismatch comprises 1-3 nucleotides.

22. (Original) The set of mixed homologous probes of claim 18, wherein said mismatch is located 2-20 nucleotides upstream or downstream of said site of variation.

23. (Original) The set of mixed homologous probes of claim 19, wherein said mismatch is located 2-20 nucleotides upstream or downstream of said site of variation.

24. (Original) The set of mixed homologous probes of claim 18, wherein the set of mixed

homologous probes have lengths between about 15 and about 50 nucleotides.

25. (Original) The set of mixed homologous probes of claim 19, wherein the set of mixed homologous probes have lengths between about 15 and about 50 nucleotides.

26. (Original) The set of mixed homologous probes of claim 18, wherein said set of mixed homologous probes are in a single container.

27. (Original) The set of mixed homologous probes of claim 19, wherein said set of mixed homologous probes are in a single container.

28. (Original) A kit for the detection of at least one target sequence from a family of target sequences, comprising at least one non-linear probe complementary to a specific target sequence of said family of target sequences and having a mismatch in said complementarity for at least one of the target sequences from said family of target sequences and an detection system for said at least one target sequence.

29. (Original) A kit according to claim 28, comprising a set of mixed homologous probes for detection of at least one allelic variant of a family of target sequences, wherein at least one of said set of mixed homologous probes is non-linear, said set of mixed homologous probes comprising at least one sequence completely complementary to and specific for one of the allelic variants of said family of target sequences, except for a specific mismatch located upstream or downstream from a site of variation.

30. (Original) A kit according to claim 28, wherein said detection system comprises amplification of said at least one target sequence.

31. (Original) A kit according to claim 29, wherein said detection system comprises

amplification of said at least one target sequence.

32. (Original) A kit according to claim 30, wherein said amplification of said at least one target sequence is selected from the group consisting of polymerase chain reaction (PCR), nucleic acid sequence-based amplification (NASBA), strand displacement amplification (SDA) and transcription-mediated amplification (TMA).

33. (Original) A kit according to claim 28, wherein said detection system comprises isolation of said at least one target sequence.

34. (Original) A kit according to claim 29, wherein said detection system comprises isolation of said at least one target sequence.